From: Jonker, Sarah

**Sent:** Friday, November 6, 2015 9:41 AM

**To:** Uppencamp, Robert; Sharp, Steve; Ellis, John

Cc: Heap, Marie

Subject: RE: Suggested Air Data Transmittal Email - PRIVILEGED AND CONFIDENTIAL;

ATTORNEY-CLIENT PRIVILEGE; WORK PRODUCT PRIVILEGE; PREPARED IN

ANTICIPATION OF LITIGATION

Follow Up Flag: BT=2;II=[CID=

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4];SBMID=40;S1=<SN1PR0801MB15496092698B5D8969FDB77C89290

@SN1PR0801MB1549.namprd08.prod.outlook.com>;FIXUP=43.518;Version=Version

15.1 (Build 312.0), Stage=H1

I'll definitely work that statement into the Executive Summary and Conclusion. Thanks Rob

From: Uppencamp, Robert

Sent: Thursday, November 5, 2015 6:11 PM

**To:** Sharp, Steve; Ellis, John **Cc:** Jonker, Sarah; Heap, Marie

Subject: RE: Suggested Air Data Transmittal Email - PRIVILEGED AND CONFIDENTIAL; ATTORNEY-CLIENT PRIVILEGE;

WORK PRODUCT PRIVILEGE; PREPARED IN ANTICIPATION OF LITIGATION

Also, in a report, the way I would word it is . . . . "based on the soil, groundwater, soil gas, subs-slab, and indoor/ambient air data collected in September 2015, the groundwater to indoor air vapor intrusion pathway appears to be incomplete". (or something like that).

From: Sharp, Steve

Sent: Thursday, November 05, 2015 5:53 PM To: Ellis, John < John. Ellis@arcadis.com>

**Cc:** Uppencamp, Robert <<u>Robert.Uppencamp@arcadis.com</u>>; Jonker, Sarah <<u>Sarah.Jonker@arcadis.com</u>>; Heap, Marie <<u>Marie.Heap@arcadis.com</u>>; Sharp, Steve <<u>Steve.Sharp@arcadis.com</u>>

Subject: FW: Suggested Air Data Transmittal Email - PRIVILEGED AND CONFIDENTIAL; ATTORNEY-CLIENT PRIVILEGE;

WORK PRODUCT PRIVILEGE; PREPARED IN ANTICIPATION OF LITIGATION

Importance: High

John – here are my thoughts below.

I agree with Sarah's revisions.

Rob – you need to weigh in.

steve

From: Ellis, John

Sent: Thursday, November 05, 2015 5:15 PM

To: Sharp, Steve; Uppencamp, Robert; Heap, Marie; Jonker, Sarah

Subject: Suggested Air Data Transmittal Email - PRIVILEGED AND CONFIDENTIAL; ATTORNEY-CLIENT PRIVILEGE;

## WORK PRODUCT PRIVILEGE; PREPARED IN ANTICIPATION OF LITIGATION Importance: High

Please review as soon as possible EPA has just sent a letter requesting these data

++++++++++++++++++
Jeff/Linda,
Below is the email we would like to send to Brian Bastek summarizing the recent air results. Also attached are the files that will be sent with the email.

As requested, attached are the following items:

- PDFs of the analytical reports from the soil gas, sub slab, indoor air, and ambient air samples that were collected in September
- Data validation reports
- Excel table that summarizes the VISLs for the constituents of concern (tab T1 VISL), the soil gas data (tab T2 SG Data ), and the indoor and ambient air data (T3 IA & SS Data)
- Figure depicting the sample locations

Our review of the data indicates that vapor intrusion from the groundwater concentrations observed in the area of Monitor Well MW-20 is NOT occurring. This is evidenced by the following:

- No detections of trichloroethene in soil gas sample adjacent to the six residential structures (SG-3, SG-4, SG-5, and SG-6)
- No detections of trichloroethene in sub slab samples collected from the six residential structures (1-SS, 2-SS, 3-SS, 4-SS, 5-SS, and 6-SS).
- Detections of trichloroethene in ambient air and indoor air at similar concentrations, which appears to indicates
  the typical exchange of indoor air with ambient air. Similar trends are observed for cis-1,2 dichloroethene,
  benzene, ethylbenzene, toluene, and xylenes. Can't use this argument because AA concentrations are much
  lower than AA.
- BTEX, Chloroform and other detected concentrations are considered background constituents. We may need to elaborate on this.

We are in the process of preparing a report that summarizes the methodologies used for the air and groundwater sampling. The report will provide a more comprehensive discuss of VI pathway and will use the groundwater data (the GW data actually didn't help our lines of evidence – I thought. If the shallow would have been ND – then yes) to further document through multiple lines of evidence that the VI pathway is currently incomplete. Summary tables, figures, sample logs, and data packages will also be provided in the summary report.

Please let us know if you have any questions or require any additional information at this time.

Thanks, John